

breakout ABSTRACT

Abstract No. 38

TITLE

DEVELOPING TOOLS FOR ESTIMATING HAZARD EXPOSURES RELATED TO PUBLIC HEALTH

TRACK

Network Sustainability

OBJECTIVES

Demonstrate the use of statistical and GIS methods for integrating multiple environmental hazard datasets into a sustainable product.

Characterize the ongoing collaborations required to develop and maintain useful data products for and Environmental Public Health Tracking Network.

Provide examples for applying estimates of potential hazard exposures for public health purposes.

SUMMARY

While it is hypothesized that chemical contaminants in the physical environment play a role in the development and exacerbation of many chronic diseases, the true environmental etiology of these conditions remains uncertain. Limited ability to assess the intensity and duration of environmental exposures is a primary source of uncertainty in tracking environmental health relationships. Exposure estimates for some primary hazards, such as agriculture pesticides and hazardous air pollutants, are often not available from a single source making it difficult to conduct ongoing, consistent evaluation and research. The Wisconsin Environmental Public Health Tracking (EPHT) program has been collaborating with multiple partners to address this data gap in a sustainable manner. As a result, methods for producing screening level tools that improve estimates of an individual's potential for exposure over time have been developed and applied. For the most part, the products have been created from the integration of data that are likely to be available from multiple states on a routine basis, and thus available to an EPHT network into the future. Wisconsin has demonstrated the utility of these tools for linking health outcomes such as childhood cancer with potential exposures, and tracking trends over time. This is a significant early step for identifying and applying methods and tools to generate hypotheses, and promote targeted, scientifically valid, and relevant epidemiologic investigations into the potential environmental origins of chronic disease.

AUTHOR(S):

Marni Bekkedal, Ph.D.

Wisconsin Bureau of Environmental and Occupational Health

Kristen Malecki, Wisconsin Bureau of Environmental and Occupational Health Jessica Schumacher, University of Wisconsin Aaron Weier, Wisconsin Bureau of Information Services

Mark Werner, Wisconsin Bureau of Environmental and Occupational Health Henry Anderson, Wisconsin Bureau of Environmental and Occupational Health







